AMENDMENTS TO THE CLAIMS

1. (Original) An inventory label generating method comprising: generating a plurality of candidate labels; and

    selecting a plurality of acceptably distinguishable labels from among the candidate labels by determining spectra emitted by the candidate labels when the candidate labels are energized, and by comparing the spectra of the candidate labels.

2. (Original) The method of claim 1, wherein the labels comprise semiconductor nanocrystals.

3. (Original) The method of claim 1, wherein the candidate labels are generated by combining a plurality of markers, each marker emitting a marker signal at an associated signal wavelength in response to excitation energy.

4. (Original) The method of claim 1, further comprising directing an excitation energy toward the markers and measuring the wavelength/intensity spectra emitted by the labels.

5. (Original) The method of claim 1, wherein the wavelength/intensity spectra of the candidate labels are determined by modeling a combination of a plurality of marker signals.

6. (Original) The method of claim 5, further comprising calculating at least one of the signals by modeling emissions from a manufacturable marker.

7.   (Original) The method of claim 5, further comprising adjusting the calculated signals form the manufacturable marker in response to measured maker signal variations.

8.   (Currently amended) The method of claim 5, further comprising measuring ~~at least on e of~~ at least one of the signals by ~~signals by~~ energizing a marker so that the marker emits the signal.

9.   (Original) The method of claim 1, further comprising comparing at least some of the candidate labels with a library of distinguishable labels to determine if the candidate labels are acceptable, and adding acceptable candidate labels to the library.

10.   (Original) A method for identifying a plurality of identifiable elements, in the method comprising: energizing a plurality of labels so that a first marker of each label generates a first signal with a first wavelength peak at least some of the labels comprising multiple-signal label having a second marker generating a second signal with a second wavelength peak; measuring the first wavelength peaks;

for each multiple-signal label, measuring the second wavelength peak at [[at]] least a predetermined minimum wavelength separation for the associated first peak; and

identifying the labels in response to the measured peaks.

11.   (Currently amended) The method of claim 10, wherein each predetermined minimum wavelength separation is at least ~~as large a a full~~ as large as a full width half maximum ~~(FHWM)~~ (FWHM) of at least one of the associated first peak and the associated second peak.

12.   (new)   The method of claim 3, wherein each candidate label comprises at least one reference marker.

13.   (new)   The method of claim 10, wherein each label comprises at least one reference marker.

14.   (new)   The method of claim 13, wherein said reference marker generates a reference signal that is used for calibrating the spectrum for the label.